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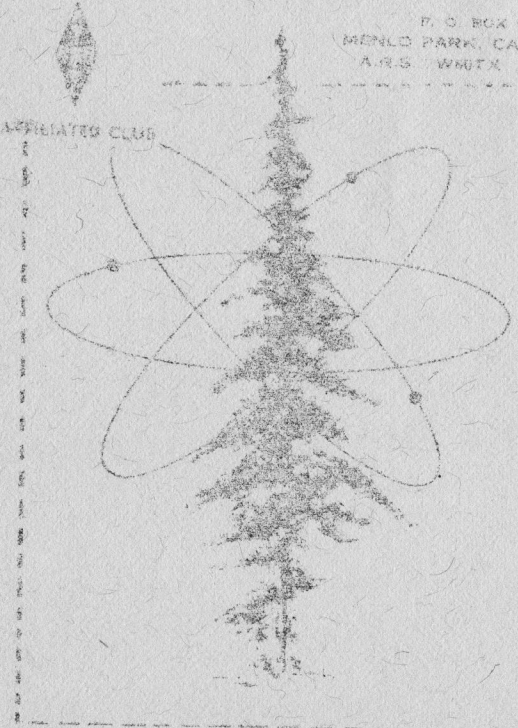
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STATION W60TX



AFFILIATED CLUB

MENLO PARK
CIVIL DEFENSE
RADIO CLUB

CITY OF
MENLO
PARK

K6YQT

Vol.
XVII
1973

Mar. 73

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 Eric Reese, WB6KQX; Tom Ohlsson, WB6KQZ; Gene Sussli,
 WA6NVU (San Carlos Bugle).

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1. Membership includes subscription to PAARAGRAPHS;
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March 1973

COMING EVENTSMeeting Notice

Friday March 2, 1973 TIME: 7:30 pm PLACE: Menlo Park Recreation Center.
Program: Wayne Ryder W6URH of SRI on Digital Counters. San Carlos
Radio Club is Host for this meeting.

BOARD OF DIRECTORS MEETING

Wednesday, March 7th, 1973 TIME: 7:30pm PLACE: The PAARA Trailar
at SRI in Menlo Park, Ca. Everyone is well come to come.

NEWS FROM AROUND THE WORLD AND HERE AT HOME

Larry R. Hought (K8 VF) is the Chief Engineer of Communications for Heath Company. Larry advises that Heath is actively studying a new line of gear aimed at the Novice operator. They have not decided whether or not they'll also market a self-powered VFO.

Albert Kahn is President of Ten-Tec. Al says that he's about ready to announce a solid-state VFO. This will be a permeability tuned oscillator with direct readout on 10 thru 80 meters. The VFO apparently is self-powered and will retail for under \$70. It will provide 50 volts output, which should do the job very well for the thousands of Novices who want to shift to VFO.

There are 105,000 licensees who hold "by-mail" types of licenses (Novice, Technician, and Conditional). This means that only about 60% (158,000) of the American amateurs population took their license exams at an FCC office. (From CCRC Circle)

CURRENT EVENTS

By Gene Reynolds

Regular Meeting Feburay 2, 1973

The meeting was held at the Menlo Park Recreation Center. Highlight of the evening was an informative talk with slides given by Ron Rasmussen, W6GXX, of San Carlos. Along with ham radio one of Ron's things is hot air ballooning. It looks like a great way to get around if you are not particular where you end up. One bit of info that surprised me was the need for a commercial pilots license to operate a balloon. It seems that the principal reason for this is the wide use of balloons in advertizing schemes. The balloons are handmade from expensive material so the price is necessarily high. The balloon that Ron goes up in has a volume of approxamately 50,000 cu.ft. The air inside is heated to over 200 deg.F. by a propane burner that is pulsed to maintain in the desired altitude. Flights generally last about 2 hours. A custom brought down through the years is the presentation of a bottle of wine to the owner of the property used for landing.. Incidentally, maybe the club could come up with a first by operating mobile from a balloon!!!!!! Many thanks to Ron for his program.

Hal Moore gave us the results of this years Simulated Emergency Test. If the points are counted as anticipated, the club improved from last year. 472 vs. 488, Hal would like to see more participation next year and the message handling is a real asset. Vance Wardlow, noted the objectives of the SET programs and that the points are only a measure of the club's improvement over the previous year.

Rick Ferranti, WN6NCX, brought in his AN/PRC-10 6 meter FM trans.-rec. A real nice little rig, especially when you concider what some of the surplus stuff looks like. This one is alomst ready to go when unwrapped. A description is in the Feburary issue of PAARAGRAPHS. We will hear from Rick later on his DX.

FOR SALE: 40', 2-section crank-up tower with Ham-M rotor and 3-element 10,20 & 40 Meter non-trapped antenna, all in excellent condition. U take it down and will sell all for \$95.00. Call Bob Wallace K6OL on 851 0249

BOARD OF DIRECTORS MEETING Feburay 7, 1973

By Gen Reynolds

The meeitng was held at the club trailer at SRI. Those attending were: Fred Canham, K6YT, Vance Wardlow, W6FLE, Hal Moore, W6DEF, Ed Fairbanks W6AIN, Gene Reynolds K6QOM, Andy Korsak VE3F K, Tom Ohlsson WB5K , and Paul Thekan (NC???) .

meeting was called to order by Fred Canham. The minutes of the previous meeting were read and accepted. Under old business a motion to pay $\frac{1}{2}$ of the bill left from the Xmas party was made by Ed Fairbanks. The motion was seconded by Hal Moore. San Carlos will pay the remainder. A motion was made by Tom Ohlsson that the club purchase 400' of Coax that is available at 9 $\frac{1}{2}$ cents a foot. Part of this will be used to replace that used at the trailer. The motion was seconded by Hal Moore. A question was brought up as to who in the club is authorized to sign club checks. At present Fred Canham, President and Vance Wardlow, Treasurer, hold the purse. Hal Moore, our AREC co-ordinator, said that there are many club members, especially new members, that have not been signed up. Hal will be contacting these people in the near future.

New business was opened by Fred Canham with an adress for the F.C.C. It is as follows; F.C.C. Monitor Station, Dagnino, Livermore, Calif. 94550. Telephone (415) 447-3614. Only violations which cannot be taken care of by amateur radio operators should be reported. In other words, count to 10 before picking up the phone. Fred noted a request in the CCRC bulletin for area amateur radio clubs to contact the Bay Area Mountain Rescue Unit if they would be able to help with communications during rescue operations. This would be a real challenge for the more outdoor types who may have time to spare. It is believed that most of the radio links used now are of CB type and of limited range. Fred will look into this and have more info later. Field Day was discussed at lenght as that time is creeping up on us again. Last years location is still in doubt because of future construction plans on the sight. Also the lack of a gen erator is a prblem.

(cont. to page 6).

(cont, from page 5)

Tom Ohlsson, has agreed to head the VHF activity. He has equipment for 50, 144 and 220 .

A discussion was held on the possibility of a "recognition award" to be given by the club to local amateur for their individual achievements. Tom Ohlsson and Ed Fairbanks are going to study this further.

Antenna layout on the roof of the SRI steamplant roof was talked over. The 2M vertical co-linear antenna being given to the club may be used for Field Day and then permanently mounted at the trailer site.

Hal Moore commented on the confusion experienced in message procurement and handling during the last SET. Only experience will correct this! Hal could also use more help on his end of the link. He hopes to expand the operations next year and involve more people.

FROM PRESIDENT NIXON

In a letter to ARRL Pres. Dannals concerning floods that hit South Dakota and Eastern U.S. President Nixon said: "While the nation's amateur radio operators have a proud tradition of emergency service, their efforts during the past summer merits special recognition. I hope you will convey to all members of your organization, and particularly those who took part in flood rescue operation, my warmest congratulations on a job well done." (From ACTIVE KEYS)

One reason they put men's faces on money is that women are satisfied just to get their hands on it. (From ACTIVE KEYS)

SAFETY !!!!!!!!!

Does everyone in your household know how and where to turn off the "juice" in case of an emergency?

Do you have a main switch that kills everything, and is it marked "Emergency Switch" (From CCRC Circle De Ø BEAT)

* * * * *

FOR SALE: \$0'2-section crank-up mast, CDR rotor, 3el beam, non trapped 10,15,20. All \$95. Call Bob K6OL 851 0249

FOR SALE

Hi-voltage Amateurs: The club has two donated transformers to sell at a most reasonable price. Primary tapped at 105-115-125 volt. Secondary 800 volt each side of center tap. These two can easily give 3200 volts. They are 4 $\frac{1}{2}$ " square and 6 $\frac{1}{2}$ " high approx. If interested call Ed Fairbanks W6AIN on 322-0319. P.S. A couple of chokes also available.

FOR SALE

BC-1031A Panoramic Adaptor. \$30.00, BC-312hx Revr: \$15.00
T22/ARC-5 Xmtr: \$8.00, BC-696a Xmtr: \$8.00, R27/ARC-5 Revr. \$5.00,
(3) BC-453 Low Freq Revrs. \$10.00 each., Heath HC-10 VFO (very good condx) \$15.00., R-6 DC Voltage Reg. (Useful meters and parts) \$5.00.,
BC-375/TU-5B tuning unit. (good condx) \$5.00 Call 365-7216 Fves-Weekends., Marv K6LNY.

A BIOGRAPHY OF HIRAM PERCY MAXIM

Hiram Percy Maxim (1AW) is called the father of Amateur Radio and he truly was instrumental in organizing and promoting the amateur radio service. Mr. Maxim successfully led fights to save our service on three occasions when legislation threatened to wipe it out. If you want a copy of his biography, send \$5.95 to Alice Shumacher, 115 17th Street North, Great Falls, Montana, 59401: she'll send you your copy postpaid. The title of the book is Hiram Percy Maxim Father of Amateur Radio. (From CCRC Circle)

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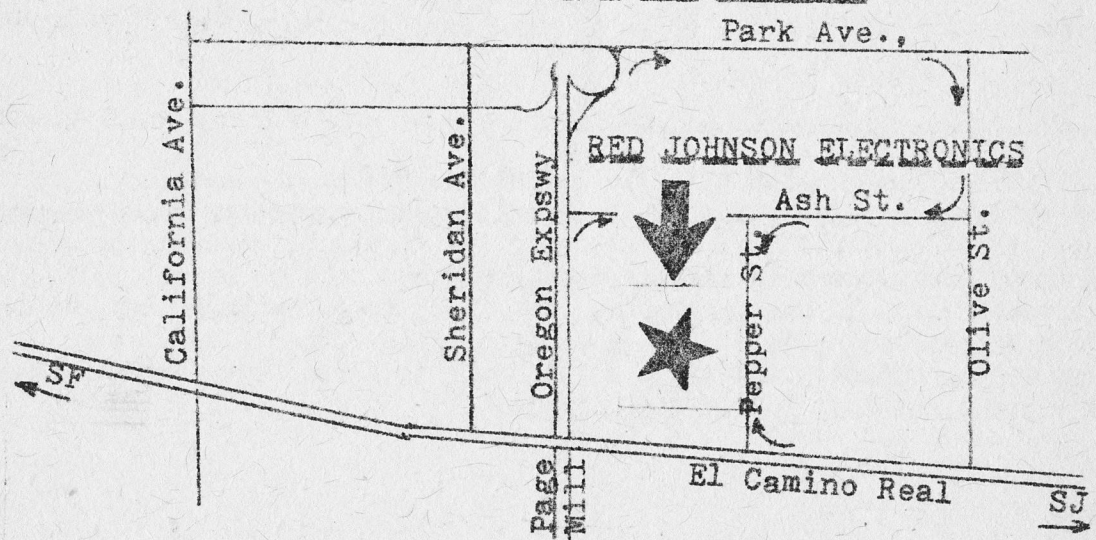
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Farmer Electric Scanner (electric eye) to relay model TE-3
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1) Chain around Bumper antenna mount \$5.00 or

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3 Potter-Bunfield KRP 14 amp 3 pole Double Throw octal plugin
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5 Potter-Bunfield KRP 11amp 2 pole Double throw Octal plugin
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Two Frost Sensing relays ER-10-5p octal 115 Volts AC. at 5amps
fn new \$3.00 or offer

Call Chuck Carpenter K6HPP 325-4845 786
Colema Ave. #K Menlo Park, Ca. 94025

FIELD DAY AS SEEN BY A DREAMER

By Lee Salaznik WB6BJB
Managing Editor

After the article by Jerry Starkey, WA6LIJ about last years Field Day. I will tell you a little about how Field Day should be.

As every amateur radio operator knows ther is z party that goes up to the Field Day sight and puts up the antennas for the big event. They will have the antennas up from last year. This will save us a lot of work.

The Cw station will be manned by a mini-computer that will search for a station calling C Field Day and will answer that station at a fast speed. Then put it in to a log that is typed out on a printer. The computer will also sent a CQ Field Day after it has worked all the stations calling C. It also puts all the stations it has worked in to a memory and keeps track of the stations it has worked. We can with this system work stations at the fastest rate known, which makes maximun use of the station. The transmitter will also be tuned automatically for the best transmission. The band can also be changed at a preset times for best band conditions. This data is now beeing analysed at this time for Field Day.

The Two Phone stations will be up graded also to a extent that has never been realised in the history of amateur radio. The transceiver will be set up some what like the Cw station. But they will have to be semi-automatic station. The operator will have to do the logging by hand, putting the call of the station in a coded form by pressing a mini-keyboard, that can handle all the calls given to a amateur station. CQ Field Day will be prerecorded on a tape recored and be sent at the operators opinion. The transceiver will automatically tune across the band looking for station calling CQ. The operator has the opinion of stopping the tranceiver if he hears a CQ Field Day. The time the station was worked, the power and frecuency are put in the log automaticly.

With this advanced technology and engineering Field Day will be more fun and have a higher score. With this behind us on to Field Day 1973. How about it Fred!!!!!! Until we meet again on the pgs. of PAMAGRAPHS best of 73's.

AREC THE 1973 SIMULATED EMERGENCY TEST

By Hal Moore W6DEF

The 1973 edition of the Simulated Emergency Test is history. I have turned in a score of 494 points which is 22 points above last year's score. The score was derived as follows;

Total number of AREC registrants on my list:	96	times	1	is	96	pts.
Number of licensed amateurs who participated:	89	"	2	"	178	"
Number of messages sent by AREC or RACES members to the SEC or State R.O.:	55	"	1	"	55	"
Number of mobiles units:	11	"	5	"	55	"
Number of fixed stations using emerg. pwr all during the test:	1	"	5	"	5	"
Messages originated on behalf of served agency:	3	"	5	"	15	"
Contact with agency to be served (ten points per community.):	7	"	10	"	70	"
Press release (just ten points regardless of number of newspapers):					10	"
Local Emergency Plan (RACES OK)					10	"
					<hr/>	
					Total	494

Hope that all who took part enjoyed the 'work out'. I think that is partly why we do these things, for the enjoyment of getting together on the air doing something useful. W. Conely Smith K6DYX of Monterey once said that handling traffic on the National Traffic System gave him an excuse for being on the air. I'll go along with that.

HAM COLUMN IN S.F. PAPERS?

You know Ray Meyers W6ML has been writing a very interesting column "Calling CQ--Ham on Air" in the Saturday Los Angeles Herald examiner. I believe there are enough Hams, and enough material in our Bay Area counties to make such a column an attractive addition to the Examiner-Chronicle. I wonder if a bunch of letters to the right people could make it happen!!!! (from CCRC Circle)

ARRL OFFICIAL BULLETINS

#407 Jan. 3

FCC has proposed to raise its revenues by thirty percent through raises in fees collected from virtually all licensees. Amateur fees would go from nine dollars to ten for new, renewed or modified and renewed licenses, from four to five dollars for straight modification. Special call sign fees would stay at twenty five dollars and duplicate licenses at six. Novice, military recreation, RACES and reciprocal authorizations would all remain free of charge. Deadline for comment on the proposals, called Docket 19658, is February 13 and for reply comments February 28, 1973. ARRL members may wish to convey their reactions immediately to the appropriate League director as shown on page 8 of QST. The topic will undoubtedly be discussed at the Board meeting January 18. Further information on the docket will be in the February issue of QST.

#408 Jan 11

November SS scores and entries are down slight from last year. High claimed single operator cw scores are W7RM operated by K7VPF 67,325, W6MAR 163,425, WB6ABK/6 159,600, W6HX by WB6OLD, 156,954, K6EBB by W6CUF, 155,250, W3CRE 149,400, K1ND 145,440, K1LPL/3 143,420, W9YT by WA9TPV 136,080 and K6QYB by K6OJ 135,675. High claimed single operator phones are W7RM operator by K7VPF 241,050, WA9GMK by K9KGA 211,875, W9YT by K9LB 199,650, WA5JMK 195,150, WA8DT 192,696, K1VTM 184,500, W7QAD by W7MWR 183,150. A full listing of claimed single and multioperator high claimed scores will appear in the March issue of QST.

#409 Jan 18

Attention DXers. Announcement is hereby made of the addition to the ARRL countries of Mt. Athos. Submission for credit for contact with Mt. Athos may be made starting March 1, 1973. Confirmations submitted before March 1 will be returned without credit. Full details on this item appears on page 98 of February 1973 QST.

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By Joe Hood, K2YAH
(From MODULATOR)

THE RATTLESNAKE AFFAIR

It is not often that things work out quite so well for our TVI committee as they did during the Rattlesnake Affair. It all began one quiet day in late May 1972 when the Monroe County Sheriff's office received a complaint from a resident on Chile Avenue that her television was being interfered with by some "gentleman" using the name Rattlesnake.

Since the Sheriff's office has neither the authority nor the desire to become involved in TVI cases, the complaint was referred to our illustrious TVI counter agent, Mr. Gessin, WA2 NC. When he heard the identifier "Rattlesnake" there was little doubt in Agent Gessin's mind as to the source of the problem. It was once again one of those unfortunate circumstances where illegal operation by an irresponsible person in the 27 Mhz citizens band could be confused with amateur radio. Being an avid amateur himself, Agent Gessin began to probe for a solution to the problem.

As fate would have it a member of a well known government agency with the initials FCC just happened by Agent Gessin's place of employment that day. Agent Gessin mentioned the Rattlesnake Affair to the government employee who listened with great interest....the hunt was soon on.

The FCC Agent drove to the interferees location and listened on 27 MHz. It wasn't long before the unscrupulous Rattlesnake again slithered out of his hole and made an appearance on 27 MHz. The FCC agent quickly determined the source of Mr. Rattlesnake's emissions and proceeded to the front door where upon he knocked asking to see the Rattlesnake's den, his equipment, and of course, his operator's license. The tour of the den proved most interesting. The Rattlesnake was true to his name having attached an amplifier of the several hundred watt category to his 5 watt rattler. Attached to the business end of the amplifier was a 6element venom intensifier making the Rattlesnake's rattle even louder. The FCC agent was so impressed with the Rattlesnake den that he issued the Rattlesnake an engraved invitation, on government stationery, to attend a session specially reserved for him in Federal Court. As a result, things are very quiet for Agent Gessin. He once again has time to enjoy a little operating on the bands where a kilowatt is legal, where call signs are used, where people use their real names and where the average mental age approaches a two digit figure.

Richard Ferranti

Two Conversions for Novice VFO's--"Freedom for the Novice"

With the new rule changes, and after a novice has experienced the joy of using a VFO on, say, a friend's rig, he'll want one of his own. The first conversion is of my pet rig, the ARC-5. You should buy the one designed for 40-meters so you can use it on 40, 15, and 10 meters; or, if you purchase the T-19/ARC-5, you can use the xmtr on 80 or 40 meters with most commercial transmitters. The transmitter runs an oscillator-amplifier arrangement, so in the interest of the most stability, it should be run as an amplifier-buffer stage driving the xmtr you already have. This is accomplished by applying regulated 250 volts to the oscillator and amplifier plates, with either 12 or 24 volts on the filaments, depending on what you have for a filament transformer. Give me a call at 324-1539 weekends for the schematic of both the converted VFO and the power supply.

The second outline of a VFO is to use the Collins-built Navy model TCS transmitter. These cover the frequency range from 1.5-12 MHz and therefore can be used as a VFO from 80 down to 160 meters, and for 6 and 2 meters, also anything in between, including MARS and CAP frequencies. I pulled out all the 1625's in the modulator and final stages, jammed the relays shut with toothpicks and paper, (you can always tell a true ham!), and ran the oscillator-buffer stages as they are into my WRL Meteor SB-175 with 300 ohm twin lead!!!

Don't laugh--I suspect the 300 ohm impedance raises the driving voltage available to the Meteor and I get more drive on 10 meters now than with 50 ohm RG-58 cable. Again the 250-volt supply to the rig should be regulated, and, if possible, the 12-volt supply on the filaments should be regulated d.c. Because of space limitations, and probably because I am too long-winded, the schematic won't be reproduced here, but calling 324-1539 weekends will get you any other information you need. Now that I am no longer a

Novice, I finally wrote an article for Novices!

Pg 16

73, WA6NCX

PROJECT OSCAR NEWS

By Andy VE3FZK/W6

OSCAR III has turned out to be the most successful amateur radio satellite to date. Lots of DX contacts have been made through it, and at times there are as many as 200 stations heard through it, according to Walt Read W6ASH who is a very active OSCAR user in our area. There have been no technical problems since the launch in mid-October of last year. This is certainly a remarkable achievement for AMSAT Corp. (back East) who was responsible for this satellite and the previous one. The first four OSCAR's were built by our local organization - PROJECT OSCAR, Inc., at Foothill College. AMSAT Corp. is preparing the next satellite, No. 7, for launch sometime this year or maybe next year. After that, Project OSCAR, Inc. is planning a continuing series of satellites, hopefully aiming towards a synchronous satellite within ten years. There has been recently a lot of stirring up of interest in Project OSCAR, which was rather dormant for a few years since the OSCAR IV disaster.

Below are some orbit predictions and other information about OSCAR VI. Even if you can't transmit into it on 2 meters, you can still get credit for hearing stations coming out of it on 10 meters. Special QSL cards are provided by ARRL (I think). Consult QST or listen to W1AW bulletins for further information. The bulletin frequencies are also given below.

Just to point out some of the DX highlights, "K7BBO" and JA8PL made what is probably the first North-American-Asia satellite QSO on December 8 at 2225 GMT" according to QST.

OSCAR VI DATATime of Operation

Usually the satellite is turned on from 4pm Sundays till 4 p.m. Thursdays, and turned off in between these periods for recharging of batteries by solar cells. Occasionally, AMSAT turns it off at other times, as needed, and sometimes it's on when you don't expect it to be, so you might take a listen at the "off" times anyways.

Frequencies

INPUT 145.9 to 146.0 MHz

- Use edges of passband if using high power'
- Use center if low power only, otherwise you
 will clobber everybody else out of it through
 its AGC

OUTPUT 29.45 to 29.55 MHz

ORBIT PREDICTIONS

Note: Listen at least 10 minutes before the times stated. You can hear the satellite for about 20 minutes altogether - 10 before and 10 after close point of approach.

(Following data thanks to Walt Read W6ASH)

	<u>Date</u>	<u>Orbit No.</u>	<u>Over</u>	<u>Time</u>
Thurs.	Feb. 22	1634	S.F.	(PM) 8:23
Fri.	"	1646	Denver	7:23 PM
"	"	1647	S.F.	9:19 PM
Sat.	Feb. 24	1653	S.F.	9:20 AM
"	" 24	1659	S.F.	8:15 PM
Sun.	" 25	1666	S.F.	10:13 AM

Walt says that there is a repeating cycle of orbit times. Once you have them saved for a period of about 21-23 days, they repeat after that, except for a slight error of a minute or two.

SAN CARLOS BUGLE

(Report by San Carlos C.D. Radio Club)

By Bill Jackson W6CNO

Well, here it is 1973 and what a fine year it was. We beat Menlo Park and California in the Field Day Contest. Came in third in the nation, had a great picnic through the efforts of our great President, Gene Sussli. We are all by now aware of the new officers of the club, so I won't go into that at this time, but I think that all club members owe a vote of thanks to the officers of last year of no man who put more into the SCCDARE than Gene has done.

Well group, I have never had to do anything like this before I had an experience this month I will never forget. We handled several hundred messages out of Managua, Nicaragua and one of them was to a lady in Fresno who sister was killed in the earthquake and on the happier side for a lady in Atherton who six children were all OK !! It was fun but man it would have helped to have been able to speak spanish.

This year so far I have two guest speakers we can get. One is Wayne Ryder W6URH who will give a talk and demonstration on counters, and the other is John Hecomovich W6TF, who will give a talk on Solid State Devices.

This year gang we will have to be tops in the nation on Field Day, as we have some darn good operators in this here club and remember we have to beat the south group. We can keep the Trophy HI HI Hows that Andy ?????????????????? This year Gene is going to operate and make the HI score he told me so So lets hold him to it !!!!!!!

OSCAR #6 IS STILL ALIVE AND KICKING OUT SIGNALS

W6ASH has worked 14 states, Mexico and four Canadian provinces with a 6N2 and a nine element spiral. His total contacts to date total 88....join the space age.... W1AW sends out a weekly forecast on Oscar 6 at 2100 GMT every Sunday on 7080, 14080, and 21080 CW. Contact Walt if you need advice/help in finding the darn thing... he claims that it is very important to be able to point the antenna used upwards. (From THE FOOTPRINT)

+++++

19

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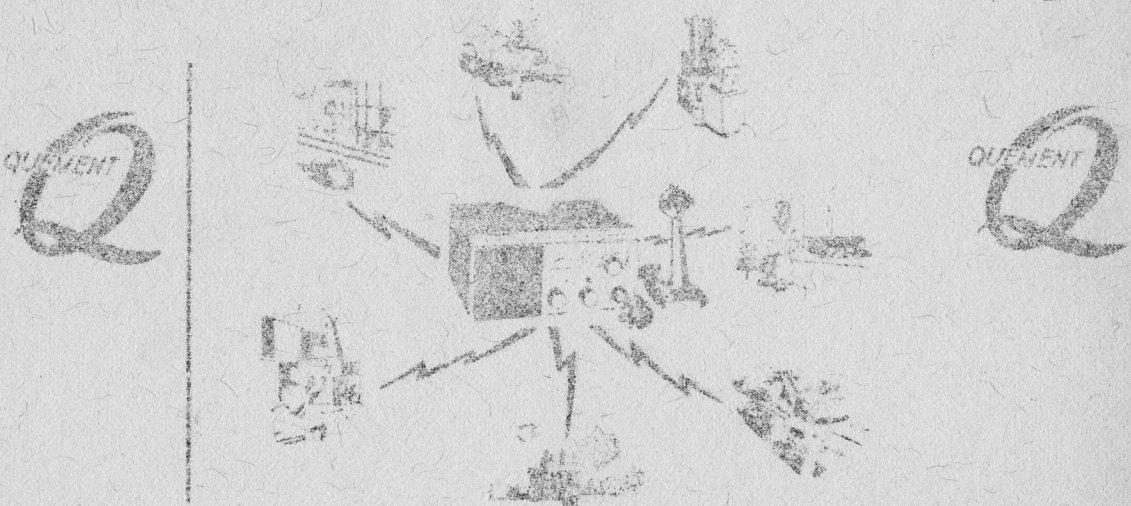
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